Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently amended) In a decoder, a method of concealing spatial errors in a coded image comprised of a stream of macroblocks which can be partitioned into sub-macroblocks comprising the steps of:

examining each macroblock for pixel data errors, and if ~~such~~ pixel data errors exist for a sub-macroblock in a macroblock, and then:

~~establishing~~ deriving, for the sub-macroblock with pixel data errors, at least one intra-prediction mode from sub-macroblocks neighboring the sub-macroblocks having pixel data errors, and then

deriving estimated pixel data in the sub-macroblock with pixel data errors in accordance with the at least one ~~established~~ derived intra prediction mode to correct the pixel data errors.

2. (Original) The method according to claim 1 wherein the coded imaged is coded in accordance with a predetermined coding standard and wherein the intra prediction mode is specified by the predetermined coding standard.

3. (Original) The method according to claim 2 wherein the coded imaged is coded in accordance with the ISO/ITU H.264 coding standard and wherein the intra prediction mode is specified by the ISO/ITU H.264 coding standard.

4. (Currently amended) The method according to claim 1 wherein the ~~establishing~~ deriving of at least one intra-prediction mode is limited to information within a rectangular array of sub-macroblocks centered about the sub-macroblock having pixel data errors.

5. (Currently amended) The method according to claim 3 wherein the at least one intra prediction mode for the sub-macroblock with pixel data errors is ~~established~~ derived in accordance with a ~~relative~~ position and direction of intra prediction modes of macroblocks neighboring the macroblock with pixel data errors.

6. (Currently amended) In a decoder, a method of concealing spatial errors in a coded image comprised of a stream of macroblocks which can be partitioned into sub-macroblocks, the macroblocks being coded in accordance with the ISO/ITU H.264 Standard, the method comprising the steps of:

examining each macroblock for pixel data errors, and if ~~such~~ pixel data errors exist in a sub-macroblock within ~~for a block in~~ a macroblock~~, where the block may or may not be the macroblock itself~~, then:

deriving at least one intra-prediction mode ~~for the block with pixel data errors~~ from sub-macroblocks neighboring sub-macroblock with the pixel data errors ~~blocks~~, the mode specified by the ISO/ITU H.264 standard; and

applying at least one interpolation filter corresponding to the at least one derived intra prediction mode to estimate the pixel data needed ~~in the block with pixel data errors~~ to correct the pixel data errors in the sub-macroblock, wherein the at least one interpolation filter corresponds to the at least one derived intra prediction mode.

7. (Currently amended) The method according to claim 6 wherein the deriving of at least one intra-prediction mode is limited to information within a rectangular array of sub-macroblocks centered about the sub-macroblock having ~~missing~~ pixel data errors.

8. (Currently amended) The method according to claim 7 wherein the deriving of the at least one intra-prediction mode is made in accordance with a relative position of intra prediction modes of sub-macroblocks neighboring the sub-macroblock with ~~missing~~ pixel data errors.

9. (Currently amended) The method according to claim 6 wherein ~~an~~ individual macroblocks can be intra-predicted as one of a single partition of 16x16 pixels (Intra_16x16 type coding) or as partition of 16 blocks of 4x4 pixels (Intra_4x4 type coding).

10. (Original) The method according to claim 9 wherein for the Intra_16x16 type coding, the intra prediction modes comprise: (a) Mode 0, vertical prediction; (b) Mode 1, horizontal prediction; (c) Mode 2, DC prediction; and (d) Mode 3, plane prediction.

11. (Currently amended) The method according to claim 9 wherein for the Intra_4x4 coding type, the prediction modes each one having associated an interpolation filter to derive a prediction for each pixel within a macroblock.

12. (Original) The method according to claim 9 wherein the prediction modes comprise: (a) Mode 0, vertical prediction; (b) Mode 1, horizontal prediction; (c) Mode 2, DC prediction; (d) Mode 3, diagonal down-left prediction; (e) Mode 4, diagonal down-right prediction; (f) Mode 5, vertical right prediction; (g) Mode 6, horizontal down prediction; (h) Mode 7, vertical left prediction; and (i) Mode 8, horizontal up prediction.

13. (Previously presented) The method according to claim 1, wherein the direction defined by the intra-prediction mode is sent in the coded stream.

14. (Currently amended) The method according to claim 5, wherein the ~~relative~~ position and direction associated with the intra-prediction mode is the ~~relative~~ position in a spatial direction associated with the direction defined by the intra-prediction mode.

15. (Currently amended) The method according to claim 8, wherein the ~~relative~~ position and direction associated with the intra-prediction mode is the ~~relative~~ position in a spatial direction associated with the direction defined by the intra-prediction mode.